

CLAIMS

1. A substrate storage container including:

5 a container body of a front-opening box for storing
substrates therein;

a door for opening and closing the front of the container
body; and

10 an inner-pressure adjustment device attached to, at least,
one of the container body and the door, for adjusting the
pressure inside the container body closed with the door.

2. The substrate storage container according to Claim 1,
wherein the inner-pressure adjustment device is composed of
an attachment cylinder, a hollowed filter support structure
15 fitted into the attachment cylinder and a filter held inside
the filter support structure.

3. The substrate storage container according to Claim 1
or 2, wherein an attachment hole for the attachment cylinder
20 is formed in, at least, one of the container body and the
door, and a guide rib for the inner-pressure adjustment device
is formed near the attachment hole.

4. The substrate storage container according to Claim 3,
25 wherein the attachment cylinder has a flange projected from

the outer peripheral surface thereof for hooking the attachment hole, the filter support structure is formed of a pair of separate support pieces opposing each other, each supporting piece having an approximately cylindrical form, and the opposing parts of the supporting pieces are extended outwards with respect to the width direction, forming filter holders.

5. The substrate storage container according to any one of Claims 1 through 4, wherein shelf elements for supporting substrates are formed on both interior sides of the container body, and among the interior sides of the container body and the shelf elements, at least part of the substrate contact area of each shelf element is formed with a low-frictional resistance portion that is lower in frictional resistance than the non substrate contact area of the shelf element.

6. The substrate storage container according to any one of Claims 1 through 5, wherein grooves for supporting substrates are formed at the interior backside of the container body, and the sectional shape of each groove is configured to be asymmetrical with respect to the center line of the substrate when the substrate is placed horizontally.

7. The substrate storage container according to Claim 5

or 6, wherein the arithmetic average roughness of the low-frictional resistance portion is specified to be 0.2a or above in terms of the average roughness (Ra).